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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,583	08/23/2004	Jesus Lobo Aleu	P/189-320	2655
2352	7590	05/03/2006	EXAMINER	
OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			LU, TONY W	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/501,583

Applicant(s)

ALEU, JESUS LOBO

Examiner

Tony Lu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/14/2004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

Claim 5 is objected to because of the following informalities:

As for claim 5, on line 3, the antecedent basis for "the banknote" is unclear.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falls US4567370 in view of Liang et al US5418855.

With respect to claim 1, Falls discloses, an authentication system for recognizing documents provided with a security mark comprising a substance(luminophors) which is excitable when a light coming from a corresponding light source(64) is emitted on it so as to emit light at different wavelengths, the system comprising: a monochromatic light source(64) of small dimensions and with focused light for exciting the substance(col.2, lines 35-49), wherein the light emitted by the light source is at a narrow

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wavelength(ultraviolet) and at one point(14); at least two detector assemblies(18,20) for detecting light emitted by the excitable substance of the security mark of the documents to be recognized; wherein each detector assembly being associated to a processing system(24,26) having a filter(76) and an amplifier(78); each detector assembly being integrated in a body(80) that groups together all the detector assemblies for detecting the light emitted by the excitable substance of the security mark, said detector assemblies having a common detection point(14), in order that the intensities of the light emitted by the mark, at different wavelength can be detected by the detector assemblies, the processing system being arranged to analyze the detected light intensities at different wavelengths(col.4, lines 1-19) and to determine whether the document recognized is an authentic document or a counterfeit document.

Falls lacks a clear teaching of comparing the detected light at different wavelengths with a set of values stored in a memory of the processing system.

Liang et al disclose an authentication system having a processing system(85) for comparing the detected light signals with reference signals previous stored in a memory portion of the processing system(read col.7, lines 6-23).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Falls by utilizing the processing system taught by Liang et al in order to provide a more reliable determination result from the system.

With respect to claims 2,8 and 9, although the Liang et al disclose a modulated frequency laser source(10, read col.6, lines 1-10) but Liang et al fail to specify whether

or not the laser source is a laser diode, selecting a specific type of light source for providing strong illuminations would have been obvious to one of ordinary skill in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the proposed system of Falls and Liang et al accordingly by utilizing a diode laser in order to provide more sufficient light intensity for the system.

With respect to claim 3, per the above discussion, Falls discloses each detector assembly is defined by a photodiode(54,56), a filter(44,46) and a lens(36,38,40,42), duly encapsulated(see fig.2).

With respect to claim 4, per the above discussion, Falls discloses the filter are selected so that different detector assemblies detect the intensity of the light corresponding to different wavelength(read col.3, lines 54-68).

With respect to claim 5, per the above discussion, Falls discloses the elements forming part of the system are arranged so that the detection path length is very short, whereby a better optical tolerance with regard to the documents pass distance, and a small-sized and low cost equipment(80), are obtained(see fig.2).

With respect to claim 6, per the above discussion, Falls discloses the system incorporates a presence detector(operator) determining the placement of the security mark on the document to be recognized(read col.3, lines 1-15).

With respect to claim 7, per the above discussion, Falls discloses the light source is provided with a filter(70) for achieving the necessary monochromatic character(read col.4, lines 29-46).

With respect to claim 10, per the above discussion, Falls discloses the system being arranged to analyze relative intensities of light emitted by the excitable substance at different wavelengths detected by the respective detector assemblies, the wavelength being determined by the respective filters(read col.3, lines 54-68, col.4, lines 1-18) integrated in the respective detector assemblies(see fig.2).

With respect to claim 11, per the above discussion, although Falls and Liang et al disclose the proposed system being arranged to determine the existence or non-existence of emission of light by the excitable substance(read col.4, lines 1-18) at different wavelengths detected by the respective detector assemblies(18,20), wherein the wavelengths being determined by the respective filters(44,46) integrated in the respective detector assemblies(see fig.2), but Falls and Liang et al lack a clear inclusion of a threshold or a reference.

Falls and Liang et al lacks a clear teaching of utilizing a threshold value for determining the existence or non-existence of the emission of the light by the excitable substance.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the proposed system of Falls and Liang et al by supplying a threshold and/or reference in order to provide more accurate analysis/determination of the detected signals/light/data for evaluation.

With respect to claim 12, per the above discussion, Falls also discloses the detector assemblies are arranged for detecting light emitted, by reflection, by the excitable substance of the security mark.

Claim 13 is rejected under 35 U.S.C 103(a) as being unpatentable over Falls US4567370 in view of Liang et al US5418855 further in view of Bercovitz et al US4922109.

With respect to claim 13, per the above discussion, the proposed system of Falls and Liang et al lacks a clear teaching of alternate components arrangements of the system such that the detector assemblies are arranged for detecting light emitted, by transimission, by the substance of the security mark.

Bercovitz et al disclose an authenticating system suggesting two alternative authenticating detection arrangements by detecting light reflected and/or transmitted by the documents being examined(read col.1, lines 10-30).

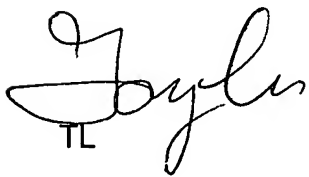
It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the proposed system of Falls and Liang et al accordingly by incorporating alternative light detecting arrangements taught by Bercovitz et al in order to provide alternative and/or desired arrangement of the components of the system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Lu whose telephone number is 5712728448. The examiner can normally be reached on M-F 9:00am- 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 5712722328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Handwritten signature of TL.



Georgia Epps
Supervisory Patent Examiner
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